

CLAIMS

What is claimed is:

1. A composition comprising a surfactant added to a liquid material containing an organic functional material and a solvent.
2. The composition according to Claim 1, wherein the surfactant is transparent or semitransparent.
3. The composition according to Claim 1, wherein the organic functional material is a light-emitting material.
4. The composition according to Claim 1, wherein the organic functional material is a polymer material.
5. The composition according to Claim 1, wherein the organic functional material is an organic electroluminescent material.
6. The composition according to Claim 5, wherein the organic functional material is a hole injecting material.
7. The composition according to Claim 1, wherein the hydrophilic-lipophilic balance of the surfactant is 1 or more and 20 or less.
8. A method of forming a film, comprising step of:

applying a liquid material to a surface, the liquid material containing an organic functional material and a solvent to which a surfactant has been added.

9. The method of forming a film according to Claim 8, wherein the organic functional material is a light-emitting material.
10. The method of forming a film according to Claim 8, wherein the organic functional material is a component constituting material of an organic electroluminescent element.
11. The method of forming a film according to Claim 8, wherein the organic functional material is a component constituting material of a color filter.
12. The method of forming a film according to Claim 8, wherein the organic functional material is a component constituting material of an organic thin film transistor element.
13. The method of forming a film according to Claim 8, wherein the organic functional material is a component constituting material of a liquid crystal element.
14. The method of forming a film according to Claim 8, wherein the film is formed by ejecting a liquid material containing the composition onto a predetermined surface with a liquid material ejecting device.
15. A film formation device, comprising:

liquid material regulating means for regulating a liquid material composition containing an organic functional material, a solvent, and a surfactant; and

liquid material ejecting means for ejecting the liquid material regulated by the liquid material regulating means onto a predetermined surface.

16. The film formation device according to Claim 15, further comprising:

transporting means for transporting the liquid material between the liquid material regulating means and the liquid material ejecting means.

17. A film formation device, comprising:

liquid material composition regulating device for regulating a composition containing an organic electroluminescent material, a solvent, and a surfactant; and

film forming unit for applying the composition regulated by the liquid material regulating composition device on a predetermined surface, thereby forming a film.

18. The film formation device according to Claim 16, comprising a stage device for supporting a base substrate having the predetermined surface, and also being movable.

19. An electro-optical device having a functional element, wherein the functional element contains a surfactant.

20. The electro-optical device according to Claim 19, wherein the functional element is a light-emitting element.

21. The electro-optical device according to Claim 20,
wherein the light-emitting element comprises a light-emitting layer and a pair of electrodes which sandwich the light-emitting layer therebetween; and
wherein the electro-optical device comprises a base substrate for supporting the light-emitting element and a current passage controlling unit disposed on the base substrate for controlling current passage to the electrodes.

22 The electro-optical device according to Claim 19, wherein the functional element is an organic electroluminescent element.

23. A method of manufacturing an electro-optical device having functional elements, comprising the steps of:
adding a surfactant to a liquid material containing a functional element constituting material and a solvent, thereby regulating a composition; and
sending the composition to liquid material ejecting means through a passage, and applying the composition on the base substrate with the liquid material ejecting means, thereby forming a film which will become components of the functional elements.

24. The method of manufacturing an electro-optical device having functional elements according to Claim 23, wherein the functional elements are organic electroluminescent elements.

25. An organic electroluminescent device having a plurality of material layers, wherein at least one material layer of the plurality of material layers contains a surfactant.

26. The organic electroluminescent device according to Claim 25, wherein a light-emitting layer of the material layers contains a surfactant.

27. A method of manufacturing an organic electroluminescent device having a plurality of material layers, comprising: adding a surfactant to a solution containing a material layer forming material and a solvent, thereby regulating a composition, and using the composition, thereby forming the material layers.

28. The method of manufacturing an organic electroluminescent device according to Claim 27, wherein the material layers are formed by ejecting liquid material containing the composition with a liquid material ejecting device.